

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 03-159400

(43)Date of publication of application : 09.07.1991

(51)Int.Cl.

H04R 3/00
G01S 15/04

(21)Application number : 01-298457

(71)Applicant : MITSUBISHI HEAVY IND LTD

(22)Date of filing : 16.11.1989

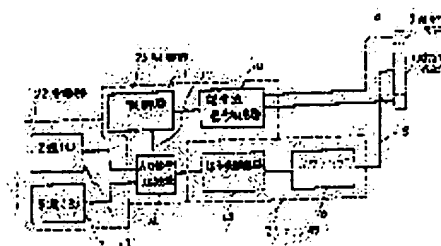
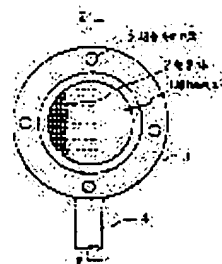
(72)Inventor : MAEHARA YASUYUKI
ONO TAKESHI

(54) ULTRADIRECTIONAL LOUDSPEAKER SYSTEM

(57)Abstract:

PURPOSE: To select a broadcast corresponding to a condition while automatically switching the sound of an ultradirectional loudspeaker corresponding to the presence and absence of viewers by deciding the presence and absence of the viewers in a front direction by a photodetector provided on the front panel of the ultradirectional loudspeaker.

CONSTITUTION: Ultrasonic photodetectors 5 are arranged around the surface, where a sounding object 2 is set up, of an ultradirectional loudspeaker 1 and the signals of ultrasonic waves to be reflected from objects such as the viewers in the front direction, out of the sounds including the ultrasonic waves generated from the ultradirectional loudspeaker 1, and the received signals are processed by a control part 23. Then, a sound source 22 is controlled. Namely, the ultrasonic waves to be sounded simultaneously with the sound of an audible area are defined as the signal generating sources and used by the ultradirectional loudspeaker 1. Thus, it is judged that there are the viewers in front of the loudspeaker and the sound source is switched so that suitable information can be given.



LEGAL STATUS